IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

FINTIV, INC.,	§	
	§	Civil Action No.: 6:18-CV-372-ADA
	§	
Plaintiff,	§	
	§	JURY TRIAL DEMANDED
v.	§	
	§	
APPLE INC.,	§	
	§	
Defendant.	§	
	§	

APPLE INC.'S OPENING CLAIM CONSTRUCTION BRIEF

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CCA: Contactless Card Applet

NFC: Near Field Communications

MNO: Mobile Network Operator

OTA: Over-the-Air

POS: Point of Sale

SE: Secure Element

SP: Service Provider

TSM: Trusted Service Manager

WMA:Wallet Management Applet

WMS: Wallet Management System

Apple Inc. ("Apple") herein addresses the constructions of seven disputed claim terms present in the asserted claims of U.S. Patent No. 8,843,125 (the "'125 patent"):[1] (1) "wallet management applet," (2) "widget," (3) "mobile wallet application," (4) "SE information," (5) "mobile device information," (6) "over-the-air (OTA) proxy," and (7) "provision[ing]." Construing these terms is necessary to both resolve disputes between the parties regarding the proper scope of the claims and to assist the jury in understanding what the claims mean.

I.   THE '125 PATENT

The '125 patent, titled "System and Method for Managing Mobile Wallet and its Related Credentials," was filed December 2, 2011 and issued on September 23, 2014. The '125 patent incorporates by reference four provisional applications[2] filed on December 30, 2010 and claims priority to the same date. '125, 1:8-20. In lay terms, the '125 patent (and its provisional applications) relate to the underlying technology for setting up a credit card on a mobile device to make contactless payments (*viz.*, making a payment with a mobile device at a card reader without physical contact). *Id.*, 1:48-62. The process of setting up a credit card for contactless payments involves interactions between the mobile device and backend servers. *Id.*, Figs. 1 and 2. In slightly more technical language from the Abstract, the '125 patent relates to a wallet management system that involves both the operation of a "mobile wallet application" and the provisioning of associated "contactless card applets" ("CCAs") on a mobile device, and also a "wallet management system" (WMS) on a remote server that is used in managing the wallets and CCAs on a plurality of mobile devices.

A.   The SK C&C Provisional Applications

Any summary of the '125 patent would be incomplete without some background discussion of the original assignee, SK C&C, and the four provisional applications incorporated

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[1] The '125 patent is attached as Exhibit 1 to the Declaration of Travis Jensen filed concurrently herewith. All exhibits cited in this brief are attached to the Jensen Decl.

[2] The four provisional applications are Nos. 61/428,846 ("'846 provisional"); 61/428,851 ("'851 provisional"); 61/428,852 ("'852 provisional"); and 61/428,853 ("'853 provisional"). The provisional applications are attached to the Jensen Decl. as Exs. 2, 3, 4 and 5, respectively.

into the '125 patent. The South Korean entity SK C&C, not Fintiv, was the original assignee of

both the '125 patent and all of its provisional applications. *See*, *e.g.*, '125, cover page. SK C&C

is an information and communications

technology company. *See* www.skcc.com.

In the 2010 timeframe, SK C&C was

developing a holistic mobile wallet

ecosystem that was intended to support

hardware devices and operating systems

from multiple vendors (*e.g.*, Blackberry,

Android, Windows Mobile, Palm). *See*,

e.g., '853, Business Requirements document

at p. 6. The figure at right, from the '846

provisional, illustrates the SK C&C mobile

wallet ecosystem which includes a mobile

device (in the center) and various external components implemented by servers. '846, p. 31.
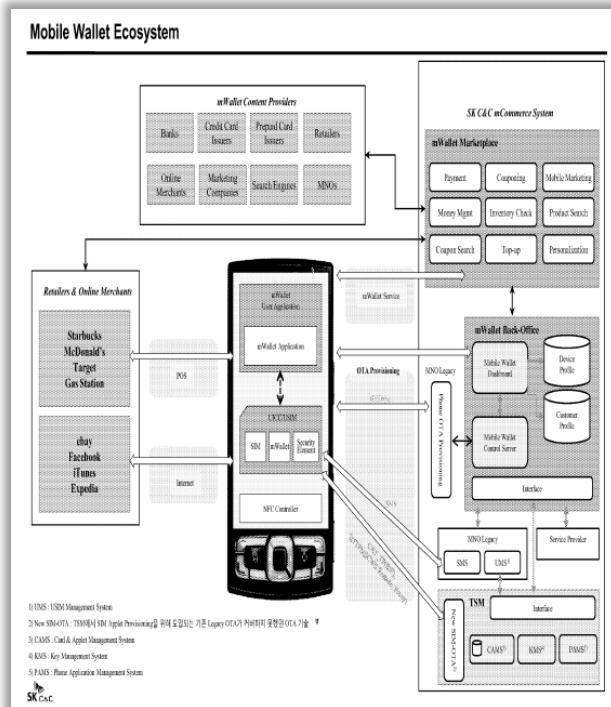
Each of the four provisional applications emphasizes a different aspect of the wallet

management system. Two provisionals include technical documents describing SK C&C's

wallet management system. At a high level, the provisional applications involve the following:

➢ The **'846 provisional** shares the same title as the '125 patent and has a similar
specification. However, the '846 provisional contains additional detail regarding certain
aspects of the wallet management system, such as the wallet management applet (WMA).

➢ The **'851 provisional** describes the provisioning process for mobile devices containing
particular kinds of secure elements, and the application includes a "Requirements Use
Cases Mobile Commerce" document describing aspects of the SK C&C system.

➢ The **'852 provisional** emphasizes safeguarding a mobile wallet by locking or deleting
virtual card credentials and how to reconstruct the wallet if a device is lost or stolen.

➢ The **'853 provisional** involves provisioning information on mobile device based on the
device user's profile or attributes, and the application includes two documents describing
aspects of the SK C&C system: i) "Business Requirements for SK C&C m-Commerce
Platform"; and ii) "TSM Functional Features Description."

Particular aspects of each of these sources of intrinsic evidence will be discussed where relevant.

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B.   Admissions from the Specification Background

To understand the asserted claims of the '125 patent, it is helpful to first understand the purported shortcomings in the prior art described in the specification. Before turning to the problems to be solved, two backgrounds points admitted in the '125 patent provide context.

First, the '125 patent admits that in 2010 numerous manufacturers made and sold a variety of mobile devices (*e.g.*, smartphones) with different hardware components and software configurations. *See*, *e.g.*, '125, 2:32-33 (referring to "many competing service providers"); 10:31-34 (manufacturers have different "hardware specifications (i.e. hardware, software, operating system, etc.)").

Second, the '125 patent admits that conducting contactless credit card transactions between a mobile phone and card reader was already "conventional" in 2010. *Id.,* 1:48-62. As stated in the "BACKGROUND" section of the patent, it was known that "user financial credentials, such as credit card numbers, may be provisioned onto mobile devices equipped with Near Field Communication chipset (NFC enabled) to make payments" and that "[t]his type of technology is conventionally referred to as 'contactless' technology and a payment made with this technology is referred to as 'contactless' payment." *Id.* Using this "conventional" technology, separate "contactless payment applet[s]" from financial institutions like Visa and Mastercard are "stored in the mobile device" and contain the user's respective credit card numbers. *Id.,* 2:1-6. This "provided a way to select a contactless payment applet (i.e., contactless payment virtual card) from various contactless payment applets stored in the mobile device for payment at corresponding point-of-sale (POS) [terminal]." *Id.*

C.   The Problems to be Solved

Against this backdrop, the '125 patent purports to identify two problems in the prior art that are relevant to the asserted claims. First, as a result of the disparate devices available from smartphone manufacturers, users would be offered for download mobile wallet applications incompatible with their mobile device. Users were "often be bombarded with various [mobile wallet] applications that may be inapplicable to the user." '125, 2:42-44. This occurred because

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there existed at the time a "lack of standardization of hardware and software on mobile devices," *id.,* 10:48-49, and mobile wallet services were "offered to the users without regard to the mobile device capabilities." *Id.,* 2:34-36. Thus, for example, a user may try to install a Visa payment applet on their Blackberry device but fail because the applet was only compatible with a Samsung Android device.

Second, users had limited access into their account information stored in the mobile device. For example, "the user may be unable to view the details related to the contactless payment applets (e.g., account number, expiration date, security code, balance and the like)." *Id.,* 2:13-15; *see also id.,* 2:27-28. According to the specification, limited user access to the financial information stored in the contactless card applet was the result of an industry standard security protocol that provided users only "a limited generic description" of the financial information stored in the contactless card applet and required storing the applet in a special chip on the mobile device called the "secure element." *Id.,* 2:23-26.

D.   Summary of the Patent

As noted above, the '125 patent (including its provisional applications) disclose a mobile wallet management system that includes both mobile devices and servers. *See*, *e.g.*, '125, Figs. 1 and 2. Because asserted independent claim 18 generally relates to the server side of the system and asserted independent claims 11 and 23 are directed to the mobile device side of the system, a high-level discussion of the major aspects of both sides follows.

1.   The Server Side.

Annotated Fig. 1 (below) from the '125 patent illustrates the server-side components of the "wallet management system" ("WMS") recited in asserted independent claim 18: the wallet client management component 111 (orange), widget management component 112 (blue), device profile management component 113 (green), rule engine 116 (yellow), and trusted service manager ("TSM") (purple).
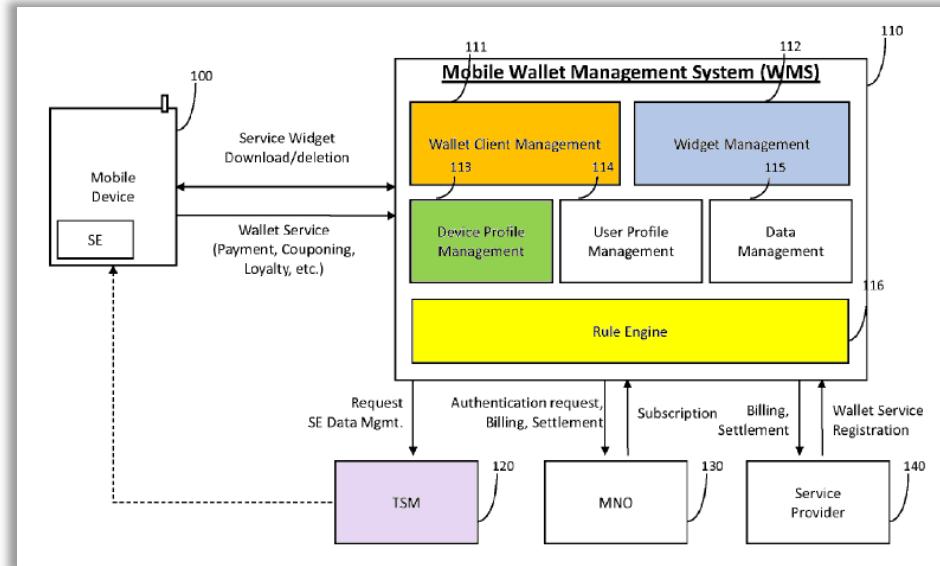
According to the '125 patent specification, this wallet management system (WMS) solves the first problem identified above of users being "bombarded with various [mobile wallet] applications that may be inapplicable to the user" due to incompatibilities arising from different mobile device hardware and software configurations. '125, 2:42-44; *see also id*. at 10:48-49 and 2:34-36. The system "dynamically filter[s] the list of available applications based upon the mobile device attributes" and only provides compatible applications to the mobile device. *Id.,* 10:42-44. Thus, the server offers an Android compatible mobile wallet application to an Android phone but not to a Blackberry, Palm, or Windows phone. *See*, *e.g.*, '853, Business Requirements document at p. 6. Each server-side component administers a different aspect of managing the mobile wallets for deployment on various mobile devices.

Wallet Client Management Component. The "wallet client management component" is responsible for managing "the [mobile] wallet application itself," and stores information "including the type of wallet application and manufacturer." *See id.,* 4:57-5:3. In lay terms, the wallet client management component acts like a warehouse for storing all of the mobile wallet applications available for download, much like a modern-day app store. For example, it may store a mobile wallet application developed by SK C&C, '851, ¶84, a "mobile wallet application

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manufactured by Google®," '125, 4:64-67, as well as other third-party mobile wallet applications, *see*'851, Requirements Use Cases document at p. 41.

Device Profile Management Component. The device profile management component "store[s] device specific information, such as information related to the mobile device itself including type of mobile device, supporting operating system (OS), mobile service provider, and other relevant information." *See* '125, 5:9-16.

Rule Engine. The rule engine performs filtering "based on information related to the mobile device." *Id.,* 5:22-24. When the '125 patent refers to "filtering," it means that when the user contacts the server with their mobile device to download an application, the server displays a "filter[ed] list of mobile widget applications that are available for installation based upon corresponding mobile device attributes," such as the mobile device's manufacturer or operating system. *Id.,* 10:9-12, 10:24-34. This filtering functionality is critical to the purported invention in the '125 patent because, as noted previously, in the prior art, "many competing service providers" offered their services to users "without regard to the mobile device capabilities or mobile service providers utilized by the user." *Id.,* 2:30-36.

Widget Management Component. The widget management component "is responsible for the individual widgets"—the "application[s] configured to interface with a user of the mobile device"—"stored within the wallet." *See id.,* 5:4-9.

Trust Service Manager (TSM). The trusted service manager (TSM) is a server that acts as "an integration point for all of the external parties the mobile device may deal with, providing for a seamless and more efficient operation of mobile services." *Id.,* 5:39-46. This provides a single point of contact for a mobile device to interact with network providers (*e.g.*, AT&T, Verizon), financial institutions (*e.g.*, Visa, Citibank), and handset manufacturers (*e.g.*, LG, Samsung). *Id.,* 10:25-34. Thus, the TSM stores "information from various parties" allowing the mobile device to "interact with the TSM system individually rather than various discrete entities." *Id*., 5:39-42. While Fig. 1 depicts the WMS as separate from the TSM, the '125 patent explains that "WMS 110 may reside within TSM system 120," and that "[f]or the purposes of

this disclosure, it will be assumed" that it does. *Id.,* 5:28-31. Because the intrinsic evidence

refers almost exclusively to the TSM rather than the WMS, we refer to the TSM as the operative

network server for the remainder of this brief.

2. The Mobile Device Side.

Annotated Fig. 2 (below) of the '125 patent illustrates the components of the mobile

device recited in asserted independent claims 11 and 23: the mobile wallet application 24

(orange), OTA proxy (green), and secure element (purple). Within the secure element are

contactless card applets 23 (blue) and wallet management applet 21 (yellow).
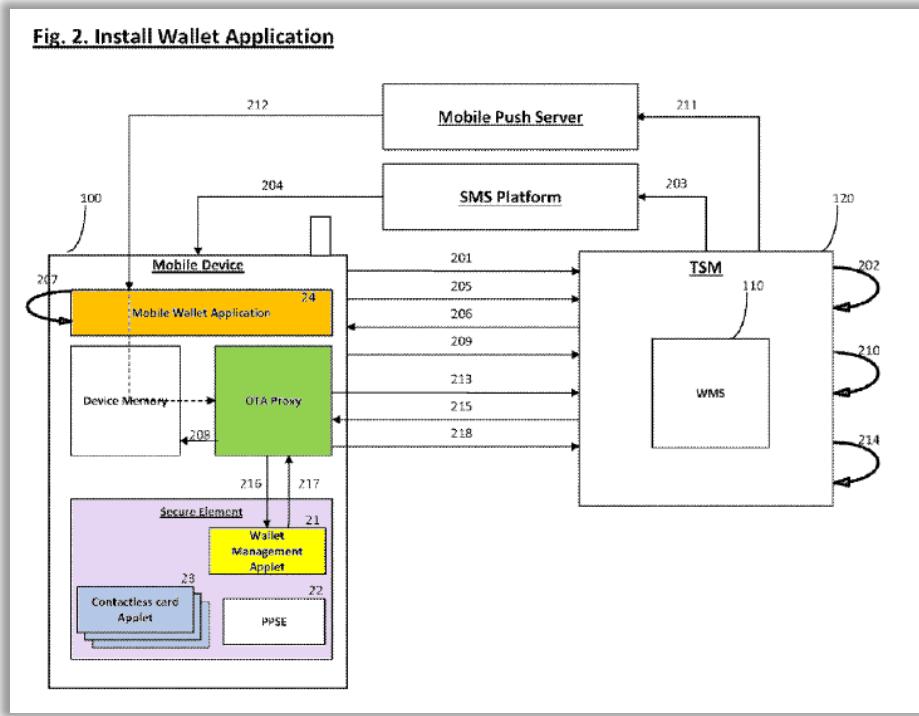
Mobile Wallet Application. Conceptually, a mobile wallet "may have the same

composition as a conventional wallet, which may contain payment cards, member cards,

transportation cards, and loyalty cards." '125, 1:43-46. The mobile wallet application is a

software application, separate from the operating system, that can be independently downloaded

and installed on the mobile device. '125, 6:34-49; '853, Business Requirements document pp. 6,

30. Because the TSM houses mobile wallet applications from different providers, the user can

select which mobile wallet application she would like to download and install. *See*, *e.g.*,'125,

4:61-67; *see also id.,* claim 1 ("[a] method for installing a wallet application"); '851, Requirements Use Cases document at p. 41 ("The system shall check what…wallet has been used (either SK C&C wallet or the third-party wallet.)").

Widget. The user is able to view each of her credit cards thanks to a "widget," which is an "application configured to interface with a user of the mobile device" that corresponds to each card and can show that card's information, on the mobile device's display. *Id.,* 5:4-9; 9:2-5. More directly stated, the widget is a user interface software application. *Id*. The widget is not shown in the '125 patent figures, but "reside[s] within the mobile wallet application." *Id*., 6:2-4.

Secure Element (SE). The secure element or "SE" is a chip on the mobile device where sensitive information can be securely stored. *Id.,* 1:40-43 (the SE "may be a smart card chip capable of storing multiple applications, including of account specific information that may not be easily accessed by external parties.").

Contactless Card Applet (CCA). Each contactless card applet or "CCA" corresponds to a conventional card, such as a credit card, found in a physical wallet. For example, a "VISA©" CCA corresponds to a Visa credit card. *Id.,* 8:61-62. Because the CCA stores sensitive information like credit card account information, it is located in the mobile device's SE. *Id.,* 8:23-28. The CCA is a "contactless" applet because it uses near field communication (NFC) protocol to "make payments to another NFC compatible device by coming near within a few centimeters of one another without physically contacting each other." *Id.*, 1:54-62.

Wallet Management Applet (WMA). The wallet management applet (WMA) is at the heart of the '125 patent's solution to the purported problem of users' inability to view credit card information stored in a CCA. *See id.,* 2:13-15 ("the user may be unable to view the details related to the contactless payment applets (e.g., account number, expiration date, security code, balance and the like)"; *see also id.,* 2:23-28 ("the user may be unable to view any account specific information stored within the SE"). The '125 patent discloses that, for each CCA, there is a corresponding WMA that stores a duplicate copy of the CCA's "account specific" information. *Id.,* 8:66-9:5. This duplicate copy of the account information is important because

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it is both securely stored in the SE, but unlike the information in the CCA itself, can be displayed to the using the corresponding widget in the mobile wallet application. *Id.*

II.   LEGAL STANDARD

"[I]n interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). In particular, the specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (citing *id.*).

Provisional applications incorporated by reference are effectively part of the specification as if "explicitly contained therein." *Advanced Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). As such, provisional applications are as relevant to the claim construction analysis as the face of the specification itself. *See*, *e.g.*, *Trustees of Columbia Univ. in City of New York v. Symantec Corp.*, 811 F.3d 1359, 1365–66 (Fed. Cir. 2016) (citing *id.*).

III.   ARGUMENT

A.   The Disputed Terms Require Construction

Apple proposed seven claim terms for construction: (1) "wallet management applet," (2) "widget," (3) "mobile wallet application," (4) "SE information," (5) "mobile device information," (6) "over-the-air (OTA) proxy," and (7) "provision[ing]." Fintiv contends that no claim terms require construction, proposed "plain and ordinary meaning" for all seven of Apple's identified claim terms, but has also proposed alternative constructions for each. The parties dispute whether certain terms had a plain and ordinary meaning in 2010, but even where the parties agree that a plain and ordinary meaning existed, they dispute what the plain and ordinary meaning was (with the sole exception of the term "provision[ing]"). Indeed, Fintiv's proposed alternate constructions serve to demonstrate the parties' disputes.

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In both circumstances—*i.e.*, where there is no plain and ordinary meaning and where the parties dispute the plain and ordinary meaning—claim construction is required as set forth in *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.* and its progeny. 521 F.3d 1351, 1361 (Fed. Cir. 2008) ("[W]hen a term has more than one 'ordinary' meaning or when reliance on a term's 'ordinary' meaning does not resolve the parties' dispute. … claim construction requires the court to determine what claim scope is appropriate in the context of the patent."). In this case, there is a clear dispute as to the proper scope of the terms addressed herein (except for "provision[ing]"), and therefore, a construction to resolve each dispute is required. A finding of "plain and ordinary meaning," as Fintiv proposes, will not resolve each dispute and is, therefore, legally insufficient.

Moreover, all the disputed terms are technical in nature or are used in a highly technical context. The jury is unlikely to be familiar with the disputed terms and without a construction will be left to its own devices to guess as to what terms like WMA, widget, and OTA proxy mean. *See*, *e.g.*, *Whirlpool Corp. v. TST Water, LLC*, No. 2:15-cv-1528-JRG, 2016 WL 3959811, at *11 (E.D. Tex. July 22, 2016) ("[t]hese disputed terms are technical terms and are potentially confusing, so '[t]he Court believes that some construction of the disputed claim language will assist the jury to understand the claims'") (citing *TQP Dev., LLC v. Merrill Lynch & Co., Inc.*, No. 08-cv-471, 2012 WL 1940849, at *2 (E.D. Tex. May 29, 2012) (Bryson, J.)).

B.   "Wallet Management Applet (WMA)" (claims 11 and 13)

Apple's Proposed Construction	Fintiv's Proposed Construction
"software application for storing duplicate account specific information accessible to the mobile wallet application"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "integrated functionality that enables management of a wallet related applet."

As an initial matter, the parties dispute whether the claim term "wallet management applet (WMA)" requires construction. Construction is necessary because WMA is a coined term, not a term of art, and had no plain and ordinary meaning outside the context of the patent in 2010. This is demonstrated by contemporaneous dictionary definitions—from both general

purposes and technical dictionaries—which lack an entry for this term. *See* Exs. 6, 7, 8, and 9.

That WMA is a term coined by the patentee is further established by a search of issued U.S.

patents and published applications prior to Dec. 30, 2010, the alleged priority date of the '125

patent. Among the millions of issued U.S. patents and publications, the phrase "wallet

management applet" did not appear once before the alleged priority date. *See* Exs. 10 and 11.

See, *e.g.*, *Iridescent Networks, Inc. v. AT&T Mobility, LLC*, No. 2018-1449, 2019 WL 3770833,

at *6 (Fed. Cir. Aug. 12, 2019); *Alberta Telecommunications Research Ctr. v. AT & T Corp.*, No.

09-3883 PGS, 2012 WL 3286053, at *37 (D.N.J. Aug. 10, 2012) (construction should provide

"assistance to the jury in helping them understand the meaning of this coined term"). Even if

WMA were not a coined term, construction would still be appropriate so the jury is not left to

guess what the highly technical phrase "wallet management applet" means. *See*, *e.g.*, *Intervet

Inc. v. Merial Ltd.*, 617 F.3d 1282, 1287 (Fed. Cir. 2010) ("[i]diosyncratic language, highly

technical terms, or terms coined by the inventor are best understood by reference to the

specification") (citing *Phillips*, 415 F.3d at 1312-13).

Where a claim term is a "coined term, meaning it has no ordinary and customary

meaning," it is necessary to turn to the intrinsic evidence to ascertain the "objective boundaries

to the scope of the term." *Iridescent Networks*, 2019 WL 3770833, at *6. When coined terms

are involved, the canon that claims should not be limited by the specification does not apply, and

courts should look to the intrinsic evidence "for guidance without having to first find a clear and

unmistakable disavowal." *Id.*; *see also Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364,

1371 (Fed. Cir. 2014).

The Court should construe WMA as a "software application for storing duplicate account

specific information accessible to the mobile wallet application." This construction follows from

the intrinsic evidence, including numerous references and explanations in the specification. For

example, the '846 provisional states that "[the WMA] is a *software application* [residing] within

the secure element of the mobile device which *stores account specific information such as a*

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credit card number."[3] '846, ¶42; *see also* '125, 7:16-19 ("The WMA 21 container is a software application …"). The '846 provisional further explains that "[the WMA] *is unique* in that, its *primary purpose* is to cause *contactless card applet 23 account information to be stored within the mobile device's SE separate from the contactless card applets.*" '846, ¶42. In other words, the defining characteristic that makes the WMA "unique," is that it stores a copy of the CCA account specific information "separate from" the CCA.

This same message is repeated numerous times throughout the '125 specification and in every one of the provisional applications:

> ➢ "Once *account specific information is installed into WMA 21*, the respective mobile device may access the information periodically." '846, ¶59.
>
> ➢ "[A]s mobile devices cannot access the payment applets directly, *a separate WMA 501 is required.…WMA 501 will store duplicate payment applet account information* so that mobile wallet application may access the account specific information stored within the SE." '851, ¶¶89-90.
>
> ➢ "When providing for APDU commands, *duplicate financial information is created …* and sent to be provisioned into the WMA." '852, ¶¶76-77; *see also id.*, ¶62.
>
> ➢ "*[A] separate WMA 501 is required* for the management of mobile wallet cards stored within mobile wallet application. During the provisioning process, *WMA will store duplicate account information as the payment applet*, so that mobile wallet application may access the account specific information stored within the SE." '853, ¶78.

See also '125, 9:45-48 ("account specific information is installed into WMA 21…"); 7:43-47 ("The respective account information or WMA 21 applet may be provided by duplicating the account information associated with the contactless card").

The specification explains that the reason storing duplicate account information in a WMA is necessary is because the CCAs "do not allow direct access into the applets themselves." '846, ¶42. There is thus no way for the mobile wallet application, or by extension the user, to "view account specific information" stored in the CCA, such as the "credit card number, security code, PIN, [and] expiration date." *Id.*; *see also* '125, 7:32-37.

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[3] All emphasis is added unless otherwise noted.

The solution, the specification explains, is to provision a WMA corresponding to the CCA that stores "duplicat[e] account information." *Id.,* 7:43-47. This duplicate information is, like the CCA, stored in the SE and therefore secure, but unlike the CCA may be accessed via the mobile wallet. *Id.*; *see also*, *e.g.*, '851, ¶90 ("During the provisioning process, WMA 501 will store duplicate payment applet account information so that mobile wallet application may access the account specific information stored within the SE"); '846, ¶42 ("As the issuers of contactless card applets 23 do not allow direct access into the applets themselves, duplicate account information may be stored separately within the WMA 21 in order for the mobile wallet application to view account specific information (e.g. credit card number, security code, PIN, expiration date, and etc.)."); '853, ¶78 (the WMA stores duplicate account information "so that mobile wallet application may access the account specific information stored within the SE").

The Federal Circuit's recent decision in *Iridescent Networks* is instructive as to how the Court should approach its construction of WMA since it specifically dealt with construing a coined term. 2019 WL 3770833, at *6. In *Iridescent*, the patentee argued for a broad construction because there was "no clear disavowal" of claim scope. *Id*. The Federal Circuit explained that "[t]he question here, however, is not whether Iridescent narrowed the scope of the disputed term during prosecution from its full ordinary and customary meaning. Rather, because the disputed term is a coined term, meaning it has no ordinary and customary meaning, the question is whether the intrinsic evidence provides objective boundaries to the scope of the term." *Id*. Where "no clear ordinary and customary meaning of a coined term [exists]," there is no need "to first find a clear and unmistakable disavowal." *Id*. That is precisely the case here, and the '125 patent provides ample intrinsic evidence of the "objective boundaries" of the claim.

Additionally, Apple's construction reflects the patent's proposed solution to the purported problem in the prior art of limited user access to CCA account specific information. *See*, *e.g.*, *In re Abbott Diabetes Care, Inc.*, 696 F.3d 1142, 1150 (Fed. Cir. 2012) (construing term in accordance with "the primary purpose of the invention"). The Background section of the '125 patent states that the WMA solution is a core aspect of the alleged invention. In the

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past, the patent says, users were "unable to view the details" of the CCAs, such as their account specific information. '125, 2:8-15. As a result, users were said to be "unable to effectively manage or keep track of various contactless payment applets stored in their respective mobile devices." *Id.,* 2:16-18. Only when the account specific information is duplicated in the WMA is the mobile device, via the wallet application, able to "access the information." *Id.,* 9:45-48; *see also* '851, ¶89 ("as mobile devices cannot access the payment applets directly, a separate WMA 501 is required for the management of mobile wallet cards stored within mobile wallet application"); '853, ¶78; '846, ¶59. Like the Federal Circuit in *In re Abbott*, which looked to the purpose of the patent to inform the construction of the disputed term, the Court's construction of WMA should reflect that one important purpose of the invention of the '125 patent is to store duplicate account specific information that can be accessed by the mobile wallet application.

The term "wallet management applet (WMA)" is not a term of art and has no plain and ordinary meaning. The overwhelming weight of the intrinsic record supports Apple's proposed construction for WMA as a "software application for storing duplicate account specific information accessible to the mobile wallet application." And only Apple's proposed construction reflects that the WMA fulfills the necessary role prescribed to it by the '125 patent.

Fintiv's Alternative Construction. Fintiv's proposed construction—"integrated functionality that enables management of a wallet related applet"—fails to provide any explanation as to what a WMA actually is or does and raises more questions than it answers. An "applet" is not a mere "functionality," and defining it as such is incorrect and confusing. As explained in numerous places throughout the specification, a WMA is a software application. *See*, *e.g.*, '125, 7:16-19; '846, ¶42. It can be downloaded and installed into a mobile device. *See*, *e.g.*, '125, claim 11 (connecting to a TSM and "retrieving…a wallet management applet (WMA)"); *see also* '125, 7:12-15; 9:2-5; 9:25-28. An "integrated functionality" is not something that can be downloaded and installed and would thus exclude numerous embodiments from the specification. *See*, *e.g.*, *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276 (Fed. Cir. 2008) ("[w]e normally do not interpret claim terms in a way that excludes embodiments disclosed in

the specification"). Fintiv ascribes no meaning to the structural term "applet," and seeks to remove that aspect from the term "wallet management *applet*" completely.

Moreover, the phrase "integrated functionality" is vague and confusing because it is unclear what the WMA is integrated into. To the extent Fintiv's construction is read to mean that the WMA must be integrated into a mobile device (or secure element within a mobile device), this ignores that fact that a WMA is still a WMA even when it resides on a server prior to download. *See*, *e.g.*, '125, 7:66-8:14, 9:14-35. But Fintiv's construction fails to account for this. Beyond the mere location of the WMA, what does it mean to be integrated into something? Is an application "integrated" when it is installed onto a mobile device, or is something more required? Fintiv's proposed construction provides no answers to these questions.

The remainder of Fintiv's alternative construction, "that enables management of a wallet related applet," is also unhelpful and incorrect for three reasons. First, it ignores the very thing that the specification says makes the WMA "unique"—*i.e.* storing duplication account specific information. '846, ¶42. Second, the construction fails to explain what a "wallet related applet" is. Is the mobile wallet application itself a "wallet related applet?" Does the WMA manage itself? As the claims themselves recite, for every contactless card applet, there is a "widget and a wallet management applet (WMA) corresponding to the contactless card applet." '125, claim 11. Does a particular WMA manage the "wallet related" CCAs or widgets that it does not "correspond" to? Fintiv's construction provides no answers to any of these questions.

Third, Fintiv's construction suggests that the WMA performs any kind of wallet management activity, as opposed to the specific role of the WMA described throughout the specification. The '125 patent explains that there are wallet management activities performed by *other* aspects of the wallet management system. *See, e.g.*, '125, 3:31-37 (server-side "wallet client management component to store and to manage a mobile wallet application; a widget management component to store and to manage widgets; a device profile management component to store mobile device information"); 9:2-5 (the "user may view and *manage* the information stored in the WMA21 applet *through the corresponding widget*"); 10:56-57 ("all of

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the provided limitations may be managed and applied by the Rule Engine in the TSM system

120") . Fintiv's construction improperly ascribes these roles to the WMA.

C.   "Widget" (claims 11, 18, and 23)

Apple's Proposed Construction	Fintiv's Proposed Construction
"user interface software application"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "integrated functionality that relates to applications related to a financial institution transportation account, and the like."

As with WMA, the parties dispute whether the term "widget" requires construction. To a

lay person, the term "widget" generically refers to an undefined article and is largely

synonymous with terms like gadget, gizmo, or thingamabob. Ex. 7. As evidenced by its

alternate construction, even Fintiv agrees that widget means something else in the context of

the '125 patent. This term requires construction because, if left unconstrued, the jury will be

confused as to what a widget is or does and run a significant risk of misinterpreting the term

differently from how it is used in the asserted claims. *See*, *e.g.*, *Whirlpool*, 2016 WL 3959811, at

*11 ("[t]hese disputed terms are technical terms and are potentially confusing, so '[t]he Court

believes that some construction of the disputed claim language will assist the jury to understand

the claims'") (citing *TQP Dev.*, 2012 WL 1940849, at *2.

A person of ordinary skill in the art would understand widget in the '125 patent to be a

"user interface software application." There is no dispute that a "widget" can be a software

application. If there is any dispute as to whether a widget *must* be a software application, the

intrinsic evidence answers this question the affirmative. Claim 11, directed to a "method for

provisioning a contactless card applet in a mobile device," is instructive. The mobile device

connects to a TSM and, after the user selects a CCA, the mobile device "retriev[es] a

widget…corresponding to the [CCA]" and "provision[s] the selected [CCA and] the widget."

See also claim 18 (widget management component stores widgets for downloading).

The specification compels the same conclusion that a widget is a software application. The technical documents explaining the operation of the SK C&C wallet that are incorporated into the '125 patent make clear that a widget is a software application. For example, the '851 provisional repeatedly refers to the widget as a "widget binary file." '851, Requirements Use Cases document at pp. 18-19, 44. Similarly, the glossary[4] in the '853 provisional describes the widget as a "downloadable sub module of a wallet client," and the wallet client in turn is a "downloaded mobile application." '853, Business Requirements document at p. 30.

Indeed, the widget is described as a software application in every embodiment of the '125 patent. A widget is "an application configured to interface with a user of the mobile device." '125, 5:4-9; *see also, e.g.*, *id.*, 8:19-22 (CCAs and "corresponding widget applications" provisioned onto the mobile device); *id.*, 10:10-14 ("filtering a list of mobile widget applications that are available for installation"); '846, ¶30 ("[w]idgets represent individual payment applications, transportation applications, and other related applications"); '852, ¶77 ("widget application will be installed in the SK C&C wallet for graphic display of the installed account").

A widget is more than just any software application, it is a "*user interface* software application." The specification of the '125 patent states that a widget resides within a mobile wallet application "to provide an interface to the user." '125, 8:63-65. The '125 patent explains why the widget application must act as a user interface, and it is fundamental to the stated purpose of the alleged invention and the purported problem sought to be solved. *See*, *e.g.*, '125, 2:13-29. As noted above in the WMA discussion, the WMA stores a duplicate copy of account specific information (*e.g.* a credit card account number) corresponding to a CCA. The corresponding widget provides the interface necessary for a user to access the account specific information stored in the WMA. *See generally id.,* 8:60-9:5 ("By installing both the WMA 21 applet and the widget, the user may view and manage the information stored in the WMA21

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[4] Where a specification incorporates product documentation for a commercial embodiment that includes a glossary, the glossary is relevant (but not dispositive) to claim construction. *See In re Google Litig.*, No. 08-cv-03172-RMW, 2011 U.S. Dist. LEXIS 98469, at *34-35 (N.D. Cal. Aug. 31, 2011).

applet through the corresponding widget."); *see also* '846, ¶53 ("when a request to provision the selected contactless card applet 23 is made, a corresponding WMA 21 information and widget (user display for the contactless card application 23 stored in the WMA 21) are also requested to be provisioned automatically"). For instance, a user may provision a Visa credit card CCA, and when she does so, both a corresponding widget and WMA are also provisioned. *Id.,* 8:60-62. The user is able to "view and manage" the Visa card information only through the use of the duplicate copy in the WMA, which unlike the CCA, is able to be displayed to the user by the widget user interface application. *Id.*, 9:2-5.

The understanding that a widget is a user interface application is also confirmed by the extrinsic evidence, including contemporaneous dictionary definitions and technical references that predate the '125 patent by decades. For instance, the 2010 New Oxford American Dictionary defines "widget" in the computing field as "an application, or a component of an interface, that enables a user to perform a function or access a service." Ex. 7. At least 20 years prior to the filing of the '125 patent, companies such as IBM and Fuji Xerox used the term widget to refer to user interface application software. *See*, *e.g.*, Ex. 12, U.S. Pat. 5,664,130 at 5:8-11 ("The program takes the form of an image display widget which is part of a graphics software toolkit package designed to interface application programs."); Ex. 13, U.S. Pat. 6,023,274 at 3:13-23 ("FIG. 3 shows a typical view of the display…Control panel window 90 includes widgets, such as, button windows 100, by means of which the user can interact with the application in a manner well known in the art."); *see also* Ex. 14, U.S. Pat. 5,335,320 at 5:12-39.

Because the '125 patent (including the claims, specification, and provisional applications) "repeatedly, consistently, and exclusively" uses the term "widget" to refer to a user interface software application, it should be construed commensurate with that description. *In re Abbott*, 696 F.3d at 1149-51; *see*, *e.g.*, '125, claims 16, 24; 2:13-29, 8:60-9:5; '846, ¶53. And, as in *In re Abbott*, Apple's proposed construction reflects the purported inventive concept of displaying account specific information stored in a CCA to the user. *See, e.g.*, '125, 2:8-18. The widget thus must be an application that acts as a user interface for this information for the invention to

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have meaning. For at least these reasons, "widget" should be construed as "user interface software application."

      Fintiv's Alternative Construction. Fintiv's alternative construction, "integrated functionality that relates to applications related to a financial institution transportation account, and the like," should not be adopted for at least three reasons.

      First, as explained above for Fintiv's alternative construction of WMA, the language "integrated functionality" is vague, confusing, and inappropriately non-structural. This is apparent from usage of the term widget in claim 18, which recites "a widget management component configured to store and to manage widgets." The idea of a component that stores "integrated functionality" simply makes no sense.

      Second, Fintiv's phrasing "that relates to applications related to a financial institution transportation account" is vague, confusing, and overbroad. By layering two levels of "relates to" language on top of one another, Fintiv's construction fails to describe in any meaningful way, much less in a way that is helpful to the jury, what constitutes a "widget." The twice-removed "relates to" language leaves to the imagination far too many possibilities about what functionalities are circumscribed by the term widget. For example, applications that allow users to locate an ATM or branch office on their phone are "applications related to a financial institution" that have nothing to do with the concept of a widget as described in the '125 patent but are encompassed by Fintiv's overbroad construction.

      Third, the phrase "and the like" is unhelpful because it leaves open and unexplained what things are "like" a financial institution or a transportation account and what things are not, rendering the construction even more improperly open-ended. Such open-ended language is not helpful because it fails to tell the jury what will or will not satisfy the claims *in addition to* the enumerated list of items. *See, e.g.*, *Affinity Labs of Texas, LLC v. Clear Channel Broad., Inc.*, No. 1:12-cv-205-LY, 2014 WL 1699063, at *11 (W.D. Tex. Apr. 29, 2014) (rejecting proposed construction "inserting an open-ended list"); *Express Mobile, Inc. v. Svanaco, Inc.*, No. 2:17-cv-

00130-JRG-RSP, 2018 WL 746472, at *10 (E.D. Tex. Feb. 7, 2018). A construction that creates

new ambiguities, like Fintiv's, should not be adopted.

D. "Mobile Wallet Application" (claims 11, 18, and 23)

Apple's Proposed Construction	Fintiv's Proposed Construction
"mobile wallet software application capable of being independently downloaded and installed"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "application that provides wallet functionality on the mobile device."

The parties dispute whether the phrase "mobile wallet application" requires construction.

Because the parties dispute the meaning of "mobile wallet application" as that term was used in

the asserted patent in 2010, the Court should construe the term. *O2 Micro*, 521 F.3d at 1361.

Moreover, this is a technical term that lay jurors are unlikely to be familiar with and construction

is appropriate to assist the jury. *Iridescent Networks*, 2019 WL 3770833, at *6.

The primary dispute between the parties is whether a mobile wallet application must be

"capable of being independently downloaded and installed." The intrinsic evidence compels the

conclusion that it does. Claim 18 is directed to a "wallet management system (WMS)" on a

server which includes "a wallet client management component configured to store and to manage

a mobile wallet application." Thus, the claims themselves reflect that a "mobile wallet

application" is "store[d]" on a server from which it can be downloaded.
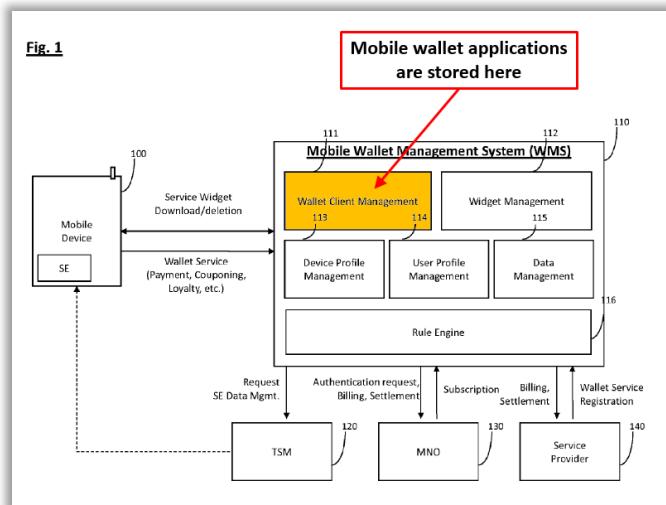
This is illustrated in Fig. 1 of the '125 patent (see above) which shows the "wallet client management component" where the various "mobile wallet applications" are stored. *See* '125, 4:52-59.

The '125 patent explains that mobile wallet applications were available from different providers. *See*, *e.g.*,'851, ¶84 ("Mobile wallet application 41, such as a SK C&C wallet"); '125, 4:64-67 ("mobile wallet application manufactured by Google®"); and '851, Requirements Use Cases document at p. 41 ("The system shall check what type of wallet has been used (either SK C&C wallet or the third-party wallet.)"). Indeed, storing various mobile wallet applications on the server for filtering (*viz.*, screening based on mobile device properties such as operating system and hardware configuration) is central to the patent's proposed solution to the prior art problem of users being "bombarded" with incompatible or irrelevant applications.

Both the claims and the specification repeatedly describe the downloading and installation of mobile wallet applications. The fact that mobile wallet applications are capable of being downloaded is reflected by the glossary entry in the '853 provisional which states that a "Mobile Wallet" is "*[a] downloadable mobile application* for mobile commerce service in the user's handset." '853, Business Requirements document, p. 30. "Exemplary embodiments of the present invention provide a method for installing a wallet application in a mobile device including requesting, by the mobile device, a mobile wallet application…, receiving mobile wallet application installation information; installing the mobile wallet application in the mobile device." '125, 3:1-7. Fig. 2 of the '125 patent is "[a] method for installing a mobile wallet application and associated management applet in a secure element (SE)." *Id*., 5:47-49. "[T]he TSM system 120 will confirm the mobile wallet application installation request and initiate the wallet application installation process." *Id.,* 6:17-19. "TSM system 120 transmits the requested mobile wallet application 24 to mobile device 100 for installation." *Id.,* 6:34-36. Claim 1 further confirms that the mobile wallet application must be capable of being downloaded and installed. Claim 1 is directed to "[a] method for installing a wallet application in a mobile device." The mobile device "request[s]…a mobile wallet application," "receiv[es] mobile wallet application

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installation information," and "install[s] the mobile wallet application in the mobile device." *See also*, *e.g.*, '846, ¶33 ("[T]he mobile device requests a new mobile wallet application."); '851, ¶26 ("FIG. 6 is a flow diagram illustrating a method of obtaining a mobile wallet application…"); '853, ¶41 ("Once the requesting mobile device has installed a mobile wallet..."); '851, ¶62 ("Ideally, once the mobile wallet application has been installed onto the mobile device, the customer will launch the mobile wallet application.").

The '125 patent explains that it purports to address the "limitation of current mobile wallet applications" that "there may be numerous applications that may be inapplicable to the user's individual attributes (e.g., bank membership, mobile service provider, manufacturer of a mobile device owned by the user, type of secure element installed in the mobile device, operating system of the mobile device, and the like)." '125, 2:30-42. The patent thus says that it seeks to prevent users from being "bombarded with various applications that may be inapplicable to the user." *Id.,* 2:42-44. The patent's solution, then, is for the server to provide the user a selection of mobile wallet applications (and associated contactless card applets, widgets, and WMAs) that are compatible with the user's mobile device and its existing characteristics, such as the operating system. *See, e.g., id.,* 4:64-67 (server recognizes the user "has a mobile wallet application manufactured by Google® and has specified set of known functionalities"); 5:12-16; 10:45-48 ("[a]s many mobile devices operate with various operating systems and standards, not all of the applets…[are]…compatible with the user mobile device").

Where, as here, the specification "repeatedly, consistently, and exclusively" describes a claim term in a particular way, a construction that reflects such a description is appropriate. *See In re Abbott*, 696 F.3d at 1150. The weight of the intrinsic evidence thus compels a construction of "mobile wallet application" as "mobile wallet software application capable of being independently downloaded and installed."

Fintiv's Alternative Construction. Fintiv's alternative construction, "application that provides wallet functionality on the mobile device," should be rejected for failing to explain what "wallet functionalit[ies]" the mobile wallet application provides. As explained above in

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Section I.D, the '125 patent's wallet management system comprises a number of components on the mobile device that each provide a particular "wallet functionality." For instance, the WMA stores duplicate account information from a CCA and the widget allows for the display of that information to the user. As the '125 patent states, however, the mobile wallet application is just a "container." *See, e.g.*, '125, 4:57-61 ("…the wallet application itself (referred as the container)…"). Thus, as a mere container, the wallet application may not perform any "wallet functionality" at all. Regardless, Fintiv's attribution of the specific functions performed by other parts of the system to the wallet application should be refused.

E.   "SE Information" (claims 14 and 23)

Apple's Proposed Construction	Fintiv's Proposed Construction
"information relating to the secure element"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "information related to the secure element that may include at least card production life cycle, card serial number, card image number, and integrated circuit card identification."

Because the jury is unlikely to be familiar with the acronym SE or the phrase "SE information," the Court should construe this term. There is no dispute that SE stands for secure element. Apple proposes a straight-forward plain-English construction for SE information: "information relating to the secure element." Fintiv does not appear to disagree, as the first part of its construction is nearly identical, but attempts to read in a list of technical terms that the jury is even less likely to understand. The Court should adopt Apple's proposed construction.

The '125 patent does not define the term "SE [secure element] information," but rather provides a non-exhaustive list of highly technical examples of SE information. *See* '125, 6:52-62 ("SE information (e.g. Card Production Life Cycle (CPLC), Card Serial Number (CSN), Card Image Number (CIN), Integrated Circuit Card Identification (IC-CID)), which may be stored in a device memory component of the mobile device 100."). To assist the jury in understanding the technology at issue, Apple proposes that "SE information" be construed to have a correct, but

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user-friendly meaning that avoids these highly technical terms and makes clear that more general and understandable information relating to the SE is also SE information. *See*, *e.g.*, *Whirlpool*, 2016 WL 3959811, at *11.

Apple's construction is supported by a number of additional examples of SE information from the provisional applications. For instance, the "Requirements Use Cases" SK C&C product document states that SE information includes information that relates to the secure element but is not unique to the specific SE in the mobile device, such as the SE's "type," operating system platform and version, and chip model and manufacturer. *See* '851, Requirements Use Cases document at p. 15. Similarly, the SK C&C "Business Requirements" document lists SE information including the SE type, logo, supported CCAs, platform, and status. *See* '853, Business Requirements document at pp. 16-17. For at least these reasons, "SE information" should be construed to mean "information relating to the secure element."

Fintiv's Alternative Construction. Fintiv contends that "SE information" requires no construction. But "SE information" is not a term the jury is likely to be familiar with. Without a construction, the jury may incorrectly believe, for example, that "SE information" means *any* information that is stored on a secure element. Fintiv's construction should be rejected for at least three reasons. First, Fintiv's "may include" language introduces additional ambiguities by failing to specify whether the enumerated items ("card production life cycle, card serial number, card image number, and integrated circuit card identification") are in fact "SE information."

Second, the "at least" qualifier creates an open-ended set which provides no meaningful boundaries and is unhelpful to the jury. *See, e.g.*, *Affinity Labs*, 2014 WL 1699063 at *11; *Express Mobile*, 2018 WL 746472 at *10.

Third, as noted above, Fitniv's construction introduces several additional highly technical terms—card production life cycle, card serial number, card image number, and integrated circuit card identification—that the jury will be unfamiliar with.

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F.   "Mobile Device Information" (claims 14, 18, and 23)

Apple's Proposed Construction	Fintiv's Proposed Construction
"hardware or software properties relating to the mobile device"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "mobile device related information."

Apple proposes that "mobile device information" be construed to assist the jury in understanding that the term means information relating to a mobile device's hardware or software properties. Without such a construction, the jury may be misled into thinking that other types of information, such as who owns a mobile device or the identity or location of the person that happens to being using it, qualify as mobile device information. In this regard, the specification of the '125 patent is instructive. As reflected in Fig. 1 of the '125 patent, the server contains separate components for storing mobile device information and user information.
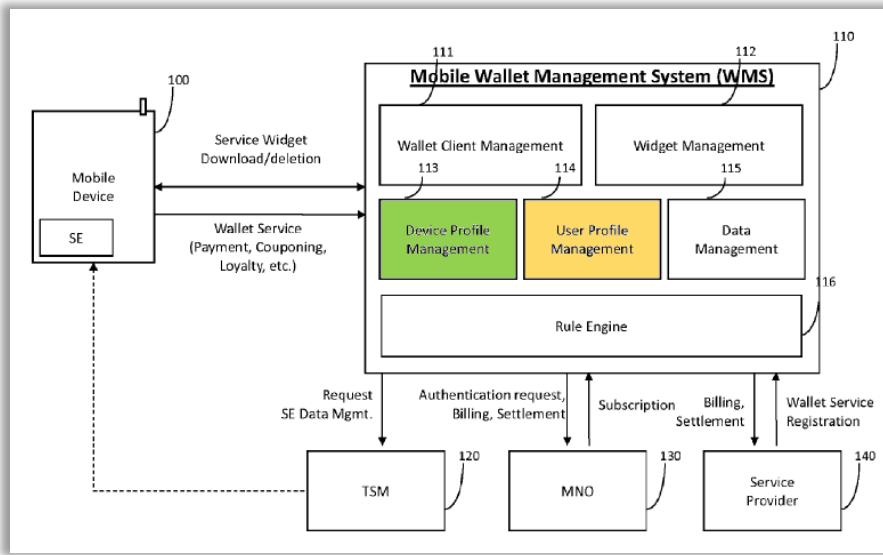
As explained in the specification, user profile management component 114 "captures user identifying information such as name, address, birthday, phone number, and the like." '125, 5:15-22. And the device profile management component 113 "store[s] device specific information, such as information related to the mobile device itself including type of mobile device, supporting operating system (OS), mobile service provider, and other relevant information." *Id.,* 5:9-16.

Notably, claim 18 recites a "device profile management component configured to store mobile device information" but makes no mention of a user profile management component, suggesting that user profile attributes have no role in claim 18 and are not included as part of "mobile device information." This conclusion is further supported by dependent claim 21, which recites "a user profile management component" as a separate element. Claim 20 provides further support for Apple's construction by enumerating the types of information that comprise mobile device information: "a mobile device type, a supporting Operating System (OS), a mobile service provider, a mobile device manufacturer, and a secure element (SE) type." All of these are hardware or software properties relating to the mobile device. The '125 patent specification provides additional examples of mobile device information, each of which also relate to a hardware or software property of the mobile device. '125, 5:9-16. And it does the same for the companion term mobile device "attributes," which include the mobile device "hardware, software, operating system, etc." *Id.,* 10:26-34; *see*, *e.g.*, *Vitronics*, 90 F.3d at 1582. Accordingly, "mobile device information" should be construed to mean "hardware or software properties relating to the mobile device."

Fintiv's Alternative Construction. Fintiv's alternative construction, "mobile device related information" should be rejected because it encompasses a variety of things that are not hardware or software properties relating to the mobile device. For example, Fintiv's construction would improperly include information such as the date on which a mobile device was announced or released for sale, the name of an individual who owns a mobile device, and the identity or location of a person that happens to being using the device. None of these types of information are contemplated by the specification.

G.   **"Over-the-Air (OTA) Proxy" (claim 23) and "OTA Proxy" (claim 16)**

Apple's Proposed Construction	Fintiv's Proposed Construction
"mobile device software application for communicating between a secure element and a server over a mobile network"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "functionality for creating a secure connection."

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As with every other term proposed for construction, Fintiv contends that the terms "over-the-air (OTA) proxy" and "OTA proxy" do not require construction. But "over-the-air (OTA) proxy" and "OTA proxy" are not terms of art, do not have an ordinary and customary meaning, and are technical in nature. Although the parties agree that OTA is an acronym for "over-the-air," the broader phrase proposed for construction—"over-the-air (OTA) proxy"—is not an established term of art and only appears once in an issued U.S. patent or published application prior to the alleged priority date of the asserted patent. *See* Exs. 15-20. The lack of an established plain and ordinary meaning is further confirmed by the absence of the terms "OTA proxy" and "over-the-air proxy" in contemporaneous general purpose and technical dictionaries. *See* Exs. 6-9. For these reasons, and those stated in section III.A, Apple respectfully submits that these terms be construed in a manner that explains the composition of the OTA proxy and the role that the '125 patent explains it plays in a wallet management system. Without a construction, the jury will not know what these terms mean.

The '125 patent's OTA proxy resides on the mobile device outside of the secure element, and acts as an intermediary between the secure element on the mobile device and a remote server such as a TSM, as depicted in Fig. 2 of the '125 patent.
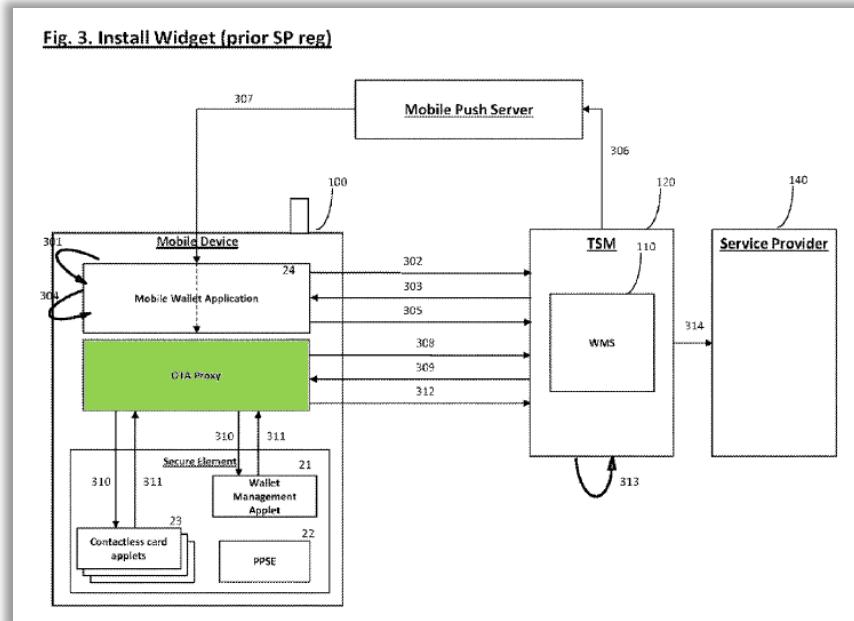
This is consistent with usage of OTA proxy in claim 23 which states that "OTA proxy is configured to capture mobile device information comprising SE information" and "transmit[s] the mobile device information for registering the mobile wallet application."

The OTA proxy is a software application that may be downloaded and installed alongside (or separate from) a mobile wallet application. *See* '125, 6:34-49; claim 9 ("transmitting an accompanying over-the-air (OTA) proxy application to the mobile device"); '851, ¶¶14-15 ("provide[s] a system to install OTA Proxy application onto the mobile device"); *id*., ¶¶58, 83 ("OTA Proxy application 42 software"). Indeed, the specification expressly refers to the OTA proxy as a "program." '125, 6:42-43 ("Once the…OTA proxy program ha[s] been downloaded…"); 6:34-37 (TSM transmits "over-the-air (OTA) proxy program" to mobile device for installation). It is not a mere "functionality" or piece of hardware as Fintiv suggests. While Fig. 2 depicts the OTA proxy as separate from the mobile wallet application, the specification explains that "the accompanying OTA proxy may be included in the mobile wallet application." *Id.,* 6:49-51; *see also* '853, Business Requirements document at pp. 4-5 ("The OTA proxy shall be a stand-alone application or a subcomponent of a wallet application").

The parties agree that the acronym OTA stands for over-the-air, and the glossary in the '851 provisional explains that "Over-The-Air (OTA) refers to any process that involves the transfer of data (including applications) to the mobile handset or any component within the mobile handset via the mobile network." '851, Requirements Use Cases document at p. 55. In lay terms, an OTA communication is simply one made "over a mobile network." While this is informative, it does not fully answer the question of what an OTA proxy is and does in the '125 patent claims. But the other intrinsic evidence supplies the answer to this question.

More than just communicating between a mobile device and a server over a mobile network, the OTA proxy in the '125 patent communicates between the mobile device's *secure element* and a network server. As explained in the '853 provisional: "OTA proxy 42 is *a necessary component to the present disclosure* which is necessary to provision confidential information, such as financial applications and related account information *into the mobile*

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device's SE." '853, ¶77; *see also id.*, Business Requirements document at p. 44 ("The OTA proxy shall provide the install, load, personalization, and life-cycle management of smart card applets on SE interfacing with TSM."); *id.,* pp. 4-5 ("[T]he OTA proxy shall process the related jobs by interfacing with TSM [and] provide the APIs for the mobile wallet to interface with the SE."); '125, 7:55-62 ("the OTA proxy gathers mobile device and SE specific information…and sends it over to TSM system"); *id.*, 9:25-35; '846, ¶47 ("OTA proxy receives the APDU commands to install WMA 21 and relays them to the SE"); '851, ¶72 ("OTA proxy protocol is provided access to the SE to be provisioned"); *id.*, ¶85 ("The OTA Proxy 42 is a mobile client which supports OTA post-issuance related services to the secure element in a mobile communicat[ions] device. More specifically, OTA proxy provisions confidential information such as financial…account information into [the secure element].").

Consistent with the weight of the intrinsic evidence, "OTA proxy" should be construed to mean "mobile device software application for communicating between a secure element and a server over a mobile network."

Fintiv's Alternative Construction. In contrast to Apple's construction, Fintiv's alternative construction of "functionality for creating a secure connection" fails to take into account the OTA proxy's role as described in the intrinsic record and should be rejected. As with "WMA" and "widget," Fintiv's proposed construction of OTA proxy as a mere "functionality" provides no structural definition and is inappropriate for the same reasons discussed above. Fintiv's proposed construction is contrary to the intrinsic evidence as it would impermissibly allow an OTA proxy to be a hardware component. *See*, *e.g.*, '125, 6:34-45 (repeatedly stating that the OTA proxy is a software "program.").

The second part of Fintiv's proposed construction—"for creating a secure connection"— is unhelpful and should be rejected because it does not explain what is being "connect[ed]." As discussed above, an important aspect of the OTA proxy is its role as an intermediary between the secure element and a remote server, and a construction that does not reflect this particular "connection" (*i.e.*, does not identify what is being connected) fails to provide the jury with the

context they need to understand the term. Nor does Fintiv's proposed construction provide any meaning to the phrase "OTA," which the specification explains means "over a mobile network."

H.   "Provision[ing]" (claims 11 and 23)

Apple's Proposed Construction	Fintiv's Proposed Construction
"provid[e/ing] and/or mak[e/ing] available for use"	Plain and ordinary meaning. To the extent the Court requires construction the plain and ordinary meaning is "making available for use."

The parties largely agree that provisioning means "providing and/or making available for use." The primary dispute is whether the Court should construe the terms "provision" and "provisioning," not the meaning of those terms. Indeed, Fintiv's proposed construction is "making available for use" and Apple has offered to stipulate to that construction and remains willing to do so. Apple submits that the term "provision[ing]," at least when used in the technical context of the asserted claims, runs the risk of confusing the jury and should be construed to avoid such a result. Claim 23 recites "an over-the-air (OTA) proxy configured to *provision* the contactless card applet, a widget corresponding to the contactless card applet, and the WMA" and claim 11 similarly requires "*provisioning* the selected contactless card applet, the widget, and the WMA." Because the jury is unlikely to know what it means to "provision" a contactless card applet, a widget, and a WMA, the court should provide the jury with guidance in the form of an undisputed claim construction which explains that "provision[ing]" simply means "providing and/or making available for use."

IV.   CONCLUSION

Apple respectfully requests that the Court adopt its proposed constructions.

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CERTIFICATE OF SERVICE

The undersigned certifies that on September 12, 2019, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document through the Court's CM/ECF system under Local Rule CV-5. Any other counsel of record will be served by a facsimile transmission or first-class mail.

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